



SECTION I- Chemical Product and Company Identification

Product Identifier: **Power Up for Gasoline (LHP)**
Supplier: Maryn International Ltd.
 Bay 5, 4216 – 54th Ave. SE
 Calgary, Alberta T2C 2E3
 Canada
Product use: Gas Additive
Emergency Phone Number:
CANUTEC – 24 hr Emergency No. 1-613-996-6666
Business Hour Number 1-403-252-2239
 (Monday through Friday 8:00am to 4:30pm MST)

SECTION II Composition/ Information on Ingredients

Hazardous Ingredients	Conc. %	C.A.S. #	Exposure limits						Carcinogen
			OSHA		ACGIH		Other		
			TWA	STEL	TWA	STEL	TWA	STEL	
Hydrocarbon Solvent	40 – 49.9	Proprietary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Polyether amine	30 – 39.9	Proprietary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Petroleum naphtha	1 – 4.9	64742-94-5	N/A	N/A	N/A	N/A	100 ppm (l)	N/A	N/A
Substituted aliphatic amine	1 – 4.9	Proprietary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	0.2%	91-20-3	10 ppm	N/A	10 ppm (s)	15 ppm	N/A	N/A	IARC Suspect Carcinogen NTP Carcinogen

(s) – Skin exposure
 (l) – Recommended exposure limit
 (N/A) – Not Available

SECTION III Hazards Identification

Emergency Overview Combustible liquid. Contains components which may cause cancer.
Potential Health Effects
Route of entry Skin contact, skin adsorption, eye contact, inhalation and ingestion.
Eye Contact Causes eye irritation with discomfort, tearing, or blurring of vision.
Skin Contact Skin contact with the product may cause skin irritation with discomfort or rash and may be absorbed through the skin in toxic amounts. May cause skin sensitization by skin contact.
Inhalation Inhalation causes irritation of the respiratory passages. Higher exposures may cause headaches, dizziness, nausea, stupor and other central nervous system effects leading to visual impairment, difficulty breathing and convulsions.
Ingestion May cause irritation of the mouth and throat, causing abdominal discomfort,



nausea, vomiting, and diarrhea. Ingestion may cause central nervous system depression with anesthetic effects such as dizziness, headache, confusion, in coordination, and loss of consciousness. Aspiration hazard: Small amounts aspirated into the lungs during ingestion or vomiting may cause lung injury. Symptoms of aspiration into the lungs include coughing, gasping, shortness of breath, bluish discolored skin, rapid breathing, and heart rate. Chemical pneumonitis from aspiration may result in fever. Pulmonary edema or bleeding, drowsiness, confusion, coma, and seizures may occur in more serious cases. Symptoms may develop immediately or as late as 24 hours after exposure.

SECTION IV First Aid Measures

Ingestion	Seek immediate medical attention. If swallowed, DO NOT induce vomiting. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. Never give anything by mouth to an unconscious person. If conscious give one glass of water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.
Skin	Wash skin with soap and water for after contact. Immediately remove contaminated clothing. Get medical attention. Wash contaminated clothing before re-use. Discard shoes and other leather articles saturated with the material.
Inhalation	If inhaled, remove to fresh air. If symptoms persist, get medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If the heart has stopped, trained personnel should begin CPR immediately. Immediate medical assistance is required.
Eye Contact	In case of contact immediately flush eyes with plenty of water for at least 15 minutes or until the chemical is removed. Call a physician.
Notes to Physician	Treatment based on sound judgment of physician and individual reactions of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration.

SECTION V Fire-Fighting Measures

Flammability	Combustible liquid: Can form combustible mixtures at temperatures at or above the flash point. Toxic fumes or vapors may evolve on burning. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back.
Means of Extinction	CO₂, dry chemicals or foam. Keep containers cool with water spray. When fighting fire, wear full protective clothing, including NIOSH approved self-contained breathing apparatus. Avoid spreading with water flooding. Fire fight from maximum distance, as heat may decompose material and rupture containers.
Flash Point (ASTM D92)	74°C (165°F) PMCC
Upper Flammability Limits	Not Determined.
Lower Flammability Limits	Not Determined.
Autoignition Point	Not Available.
Explosion Data	Material does not have explosive properties.
Fire and Explosion Hazards	Toxic fumes or vapors may evolve on burning. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back.
NFPA Rating	HEALTH 2, FLAMMABILITY 2, REACTIVITY 0
HMIS Rating	HEALTH 2, FLAMMABILITY 2, REACTIVITY 0



SECTION VI Accidental Release Measures

Personal Protection	Wear suitable protective equipment. Eliminate sources and or potential sources of ignition.
Environmental Precautions	Product has very low solubility in water. Dike spill. Do not flush to sewers, streams or other bodies of water. For disposal, see Section XIII.
Methods for cleaning up	Combustible. Isolate hazard area and restrict access. Spills are very slippery and should be cleaned up promptly. Absorb on inert material such as sawdust, sand, earth, vermiculite. Sweep up and collect in a suitable container for disposal. Observe government regulations.
Large spills	Stop leak if without risk. Dike to contain spill. Pump excess material into suitable container (metal drums, metal tanks, or such). Unless released material is cleaned up immediately for reprocessing, recycling, or reuse a release of 100 lbs may trigger reporting requirements for CERCLA Section 103.

SECTION VII Handling and Storage

Handling	Handle and open containers with care. Avoid excess heat, formation of oil mist, breathing vapours and mist from hot oil, and prolonged or repeated contact with skin. Keep away and do NOT handle near heat, sparks, flames or other sources of ignition. Fixed equipment as well as transfer containers should be grounded to prevent accumulation of static charge.
Storage	Store in a cool, dry, and well ventilated place. Keep container tightly closed. Keep away from incompatible materials.

SECTION VIII Exposure Controls / Personal Protection

Engineering Controls	Use only with adequate ventilation. If user's operation generates mist, use ventilation to keep exposure to airborne contaminants below exposure limits. Make up air should always be supplied to balance air removed by exhaust ventilation. Keep container tightly closed.
Respiratory Protection	Use approved respirator with dual organic vapor / mist and particulate cartridge if vapor concentration exceeds permissible exposure limit. Use Self-Contained Breathing Apparatus in high vapour concentrations.
Eye Protection	Chemical goggles; also wear a face shield if splashing exists.
Skin Protection	Wear as appropriate, apron, pants, hood, and jacket if potential for skin contact.
Hand Protection	Use neoprene gloves.

SECTION IX Physical and Chemical Properties

Physical State:	Liquid
Odour:	Mild
Appearance:	Light Yellow
Odour Threshold:	Not established
Specific Gravity:	0.89 at 16°C (60.8°F)
Bulk Density:	Not available
Vapour Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	Not available
Boiling Point:	Not available



Melting/Freezing Point:	Not available
Pour Point:	-27°C (-17°F)
Viscosity:	20 cSt at 25°C (77°F)
Solubility in Water:	Insoluble
pH:	Not determined
Partitioning Coefficient:	Not determined
Percent Solid:	Not available
Percent Volatile:	Unknown
Percent VOC:	Not available

SECTION X Stability and Reactivity

Chemical Stability:	Stable to normal temperatures and storage conditions.
Incompatibility:	Avoid contact with strong acids and strong oxidizing agents.
Polymerization:	Will not occur.
Decomposition Products:	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Ammonia. Propylamine, polyalkylglycols, and aliphatic alcohols may also be released.

SECTION XI Toxicological Information

Irritancy / Route of Entry:	
Skin Contact	Skin irritant. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying and cracking of the skin. The LD50 in rabbits is >2000 mg/kg.
Eye Contact	Weak to moderate eye irritant. Does not meet Canadian D2B or EU R36 criteria. Based on data from components and similar materials.
Inhalation	High concentrations may cause headaches, dizziness, nausea, stupor and other central nervous system effects leading to visual impairment, difficulty breathing and convulsions. Nose, throat and lung irritant. Based on data from components or similar materials. Exposure to a high concentration of vapor or mist is irritating to the respiratory tract.
Ingestion	The LD50 in rats is >5000 mg/kg. Based on data from components or similar materials. Swallowing this material causes irritation of mouth, esophagus and stomach, with nausea, vomiting, diarrhea and abdominal pain. Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in pulmonary edema and chemical pneumonitis.
Sensitization:	No data available to indicate product or components may be skin or respiratory sensitizers.
Chronic Toxicity:	Repeated overexposure to petroleum naphtha can cause nervous system damage.
Carcinogenicity:	There is no evidence of carcinogenicity for the middle distillates present in this product. A two-year National Toxicology Program (NTP) study found an increased incidence of tumors of the nose in rats exposed to naphthalene by inhalation. In mice similarly exposed, increased incidences of alveolar/bronchiolar adenomas were observed. Naphthalene has been classified



by the International Agency for Research on Cancer (IARC) as a possible human carcinogen (Group 2B) on the basis of sufficient evidence of carcinogenicity in experimental animals but inadequate evidence in exposed humans.

- Reproductive Toxicity:** No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
- Teratogenicity:** No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.
- Mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

SECTION XII Ecological information

Environmental Fate:

- Biodegradation** At least 25% of the components in this product show moderate biodegradation based on OECD 302-type test data.
- Bioaccumulation** 25% or greater of the components potentially bioconcentrate, based on measure octanol/water partition coefficients.
- Soil Mobility** Not available.

Environmental Effects:

- Freshwater Fish Toxicity** The acute LC50 is <1 mg/L based on component data.
- Freshwater Invertebrates Toxicity** The acute EC50 is <1 mg/L based on component data.
- Algal Inhibition** Not Available.
- Saltwater Fish Toxicity** Not Available.
- Saltwater Invertebrates Toxicity** Not Available.
- Bacteria Toxicity** Not Available.
- Miscellaneous Toxicity** Not Available.

SECTION XIII Disposal Consideration

- Waste Disposal** This material, if discarded, is a hazardous waste under RCRA regulation 40 CFR 261-33. Waste management should be in compliance with federal, state and local laws. 0.0002% Benzene, CAS no. 71-43-2, D018.

SECTION XIV Transport Information

- DOT Bulk:** Combustible Liquid, N.O.S. (Hydrocarbon solvent, Hydrocarbyl amine), NA1993, PG III, RQ (Naphthalene)
- DOT Non-Bulk:** Not Regulated
- DOT NAERG:** 128
- UN/NA Number:** Not Available
- Packing Group:** Not Available
- DOT Reportable Quantity:** **Bulk:** 85000 liters, 22457 gal.
Non-Bulk: 207.8 liters, 55 gal.
- DOT/TDG Labels:** **Primary:** Combustible



DOT/TDG Placards:	Subsidiary: None required
TDG (Canada) Shipping Name:	None Required
TDG Hazard Class:	Not Regulated
UN Number:	Not Regulated
Packing Group:	Not Available
ICAO/IATA:	Not Available
IMDG:	Not Regulated
IMDG EMS Fire:	Not Regulated
IMDG EMS Spill:	Not Applicable
IMDG MFAG	Not Applicable
IMO Marine Vessel	DO NOT TRANSPORT – ADDITIONAL INFORMATION REQUIRED
USCG Compatibility	Not Available
Marine Pollutant:	Not Available
Special Information:	No additional remarks

SECTION XV Regulatory Information

CPR Compliance:	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
OSHA Hazard Communication Standards 29CFR 1910.1200:	Not Available
TDG Regulated Limits:	None known
CERCLA:	This product contains the following hazardous components reportable under CERCLA: Naphthalene CAS no. 91-20-3, Reportable Quantity: 21043 liters, 5560 gal.
SARA Extremely Hazardous Substance:	This product does not contain more than 1 % of any chemical substance on the SARA Extremely Hazardous Substances List.
SARA Title III Section 313:	0.2% Naphthalene, CAS no. 91-20-3
RCRA:	The following components are listed under RCRA with the EPA waste number in bold: 0.0002% Benzene, CAS no. 71-43-2, D018 .
U.S. Tariff Heading Number:	3811.90.00.00
Schedule B Number:	3811.90.00.00
Other TSCA Regulations:	Section 8d (Benzene, trimethyl-) Section 4a (Naphthalene). May be subject to export notification under TSCA Section 12(b)
Cal. Prop 65:	This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects: 2 ppm Benzene, CAS no. 71-43-2, 0.2% Naphthalene, CAS no. 91-20-3



Chemical Inventory

Canada:

The ingredients of this product are in compliance with the Canadian environmental Protection Act and are present on the Domestic substances List. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

United States:

The ingredients of this product are on the TSCA or are exempt.

SECTION XVI Other Information

HMIS Information

Degree of Hazard	HMIS Rating
4= Severe	Health 2
3= Serious	
2= Moderate	Flammability 2
1= Slight	
0= Minimal	Reactivity 0

Revision Information

Prepared by: Maryn Research
Phone: 1-403-252-2239
Effective Date: April 13, 2006
Supersedes: -
Revision: 0

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